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#### Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

In the Matter of	)	
	)	
Advanced Television Systems	)	MM Docket No. 87-268
and Their Impact Upon the	)	
Existing Television Broadcast	)	
Service	)	

To: The Commission

#### SUPPLEMENT TO PETITION FOR RECONSIDERATION

KM Communications, Inc. ("KM") and Sierra Television LLC ("Sierra"), by their counsel, respectfully submit this Supplement to the Petition for Reconsideration (the "Petition") filed by KM on July 18, 1997 in the above-captioned digital television ("DTV") proceeding, as authorized by the Commission. KM requested that the Commission reconsider certain actions taken in the Fifth Report and Sixth Report in this proceeding,<sup>2</sup> as more specifically set forth in the Petition. In this Supplement, KM and Sierra provide additional information for the Petition based on OET Bulletin No. 69,3 which provides guidance for evaluating DTV coverage areas.

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See Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service, MM Docket No. 87-268, Order, DA 97-1377 (released July 2, 1997)(the "Order"). The Commission authorized parties that filed petitions for reconsideration to file supplemental information relating to their petitions, based on OET Bulletin No. 69, by August 22, 1997. Id. at ¶ 7.

Advanced Television Systems And Their Impact Upon The Existing Television Broadcast Service, MM Docket No. 87-268, Fifth Report and Order, FCC 97-116 (released April 21, 1997)("Fifth Report"), and Sixth Report and Order, FCC 97-115 (released April 21, 1997)("Sixth Report"), respectively.

OET Bulletin No. 69, Longley-Rice Methodology for Evaluating TV Coverage and Interference (released July 2, 1997).

#### I. Introduction

KM, a woman-owned and minority-owned corporation, is the licensee of four Low Power Television ("LPTV") stations, is the permittee or its principal has interests in the permittee for several new full power commercial television stations, and has additional applications pending for new full power commercial television stations, including such applications for which universal settlement agreements are pending before the Commission. Since filing the Petition, KM has assigned the construction permit for KWBA(TV), Sierra Vista, Arizona, to Sierra in a pro forma assignment authorized by the Commission (FCC File No. BAPCT-970528IA). Mrs. Myoung Hwa Bae, the President, Treasurer, 100% shareholder and sole director of KM is also the President, Manager and holds 100% of the membership interests in Sierra.

#### II. Full Grade B Replication for KWBA(TV), Sierra Vista, Arizona

In the Petition, KM requested that the Commission correct the engineering database and DTV table of allotments to provide full replication for the construction permit (FCC File No. BPCT-941021KI) for a new full service analog National Television System Committee ("NTSC") television station, KWBA(TV), formerly KAUC(TV), NTSC Channel 58 at Sierra Vista, Arizona. As demonstrated in the Petition, the DTV Channel 44 allotment to be paired with KWBA(TV)'s NTSC channel did not come close to replicating the Grade B coverage for the station, due to a Commission error in updating its database and on granting the construction permit on November 22, 1996, well prior to the April 3, 1997 cut-off for changes to the

Formerly KAUC(TV); the call sign change from KAUC(TV) to KWBA(TV) was granted by the Commission effective as of August 15, 1997. See Public Notice, Report No. 312 (released August 15, 1997).

database. See Petition at 3-5. Further analysis under the guidelines of OET Bulletin No. 69 confirms that the DTV Channel 44 allotment for KWBA(TV) does not replicate the authorized NTSC Grade B coverage area for the station.<sup>5</sup> No party has opposed the request that the DTV allotment for KWBA(TV) be corrected. Therefore, Sierra requests that the Commission promptly correct the DTV allotment table to provide full replication for KWBA(TV).

#### III. Alternate DTV Channel for KCFG(TV), Flagstaff, Arizona

KM is also the permittee (FCC File No. BPCT-950317KN) for a new full service television station KCFG(TV), on NTSC Channel 9 at Flagstaff, Arizona, for which DTV Channel 28 has been allotted and issued.<sup>6</sup> The transmitter sites for KCFG(TV) and KWBF(TV), Flagstaff, Arizona, for which first-adjacent DTV Channel 27 has been allotted, are approximately 31 kilometers apart. Although the allotments technically comply with the minimum geographic distance spacing requirements for first-adjacent DTV channels, under new Section 73.623(d)-(e) of the Commission's Rules, 47 C.F.R. § 73.623(d)-(e), analysis under the guidelines of OET Bulletin No. 69 indicates that first-adjacent channel interference potentially will occur.<sup>7</sup>

See Engineering Statement on Behalf of Sierra Television LLC, prepared by Cohen, Dippell and Everist, P.C., August 1997 (attached hereto as Exhibit 1). The map attached to the Engineering Statement demonstrates the extent to which the Grade B contour based on the incorrect parameters used to determine the DTV allotment do not replicate the Grade B contour authorized by the construction permit for KWBA(TV).

See <u>Fifth Report</u> at Appendix E; <u>Sixth Report</u>, Appendix B, Table 1 at B-9.

<sup>&</sup>lt;sup>7</sup> <u>See</u> Engineering Statement on Behalf of KCFG, Channel 9, Flagstaff, Arizona, prepared by Cohen, Dippell and Everist, P.C., August 1997 (attached hereto as Exhibit 2).

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To prevent the potential first-adjacent channel interference, KM requests that an alternate

DTV channel be allotted for either KCFG(TV) or KWBF(TV). KM has analyzed potential

alternate channels, and submits that DTV Channel 32, among other potential alternate channels,

would be a suitable alternate DTV channel that would provide full replication for both stations

(other suitable alternate DTV channels include Channels 35, 38, 40, 41, 42 and 44).

Accordingly, KM respectfully requests that the Commission substitute Channel 32 (or another

suitable alternate channel) as the DTV channel for KCFG(TV), or for KWBF(TV).

IV. <u>Conclusion</u>

WHEREFORE, the above premises being considered, KM respectfully requests that the

Commission reconsider certain actions taken in the Fifth Report and Sixth Report and grant KM

the relief requested in its Petition and herein.

Respectfully submitted,

KM COMMUNICATIONS, INC.

Alan C. Campbell

Jeffrey L. Timmons

Its Attorneys

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August 22, 1997

ENGINEERING STATEMENT
ON BEHALF OF
SIERRA TELEVISION LLC
KWBA(TV), CHANNEL 58, SIERRA VISTA, ARIZONA
RE CORRECTION OF DTV ALLOTMENT
IN MM DOCKET 87-268

**AUGUST 1997** 

COHEN, DIPPELL AND EVERIST, P.C.
CONSULTING ENGINEERS
RADIO AND TELEVISION
WASHINGTON, D.C.

City of Washington ) ) ss District of Columbia )
) ss District of Columbia
, , , , , , , , , , , , , , , , , , ,
Warren M. Powis, being duly sworn upon his oath, deposes and states that:
He is a graduate electrical engineer of the University of Canterbury, New Zealand, a Registered Professional Engineer in the District of Columbia, the State of Virginia, the State of South Carolina, and Vice President of Cohen, Dippell and Everist, P.C., Consulting Engineers, Radio - Television, with offices at 1300 L Street, N.W., Suite 1100, Washington, D.C. 20005 previously employed for 15 years with the New Zealand Broadcasting Corporation; a member of the Institution of Professional Engineers New Zealand (IPENZ), the Association of Federal Communications Consulting Engineers (AFCCE), and the National Society of Professional Engineers (NSPE).
That his qualifications are a matter of record in the Federal Communications Commission;
That the attached engineering report was prepared by him or under his supervision and direction and,
That the facts stated herein are true of his own knowledge, except such facts as are stated to be on information and belief, and as to such facts he believes them to be true.
Jarren M. towis
Warren M. Powis District of Columbia Professional Engineer Registration No. 8339
Subscribed and sworn to before me this
My Commission Expires: 2/38/98

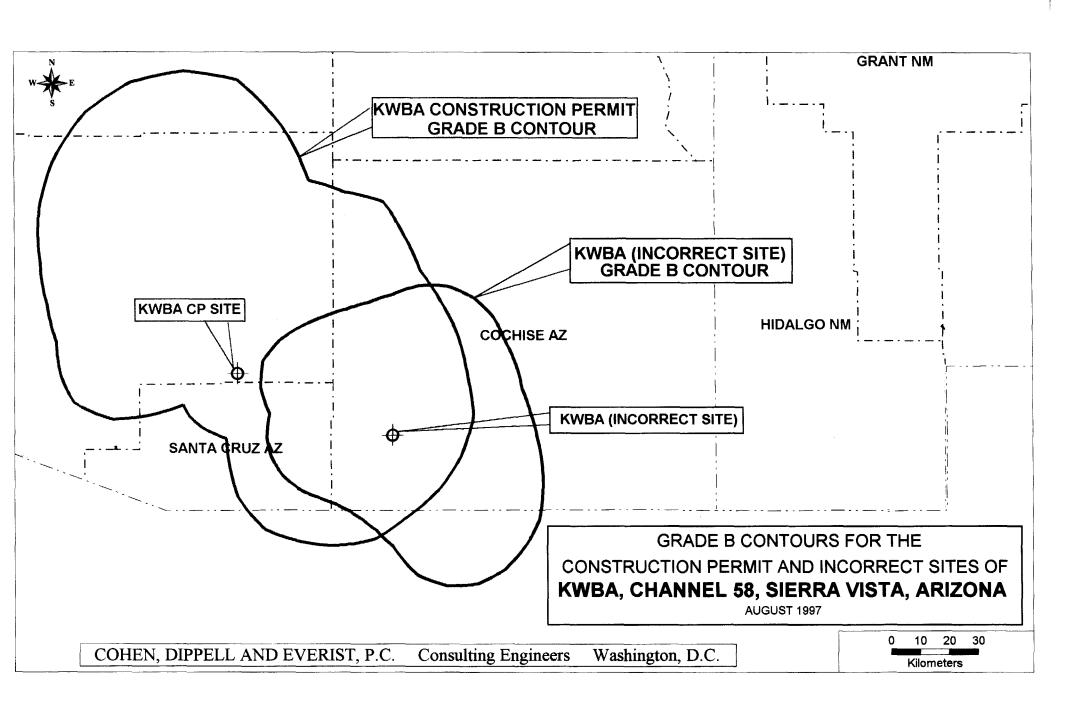
This engineering statement has been prepared on behalf of Sierra Television LLC ("Sierra"), permittee of television broadcast station KWBA(TV), Channel 58, Sierra Vista, Arizona, concerning its Channel 44 DTV allotment assigned to KWBA(TV) in the Sixth Report and Order in MM Docket No. 87-268 in the Matter of Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service ("Order").

Due to a Commission error in updating its television data base, the Order provided KWBA with a Channel 44 DTV allotment at its previously specified site which cannot replicate the authorized KWBA construction permit service area. The correct KWBA site is at the following NAD-27 geographic coordinates:

North Latitude: 31° 45′ 33"

West Longitude: 110° 48′ 02"

Attached is a map depicting the authorized and previously specified NTSC Grade B service contours. Sierra respectfully requests the Commission to reexamine its DTV Table of Allotments and to provide KWBA with a suitable DTV channel and appropriate power level to achieve full replication of its correct NTSC Grade B contour.



ENGINEERING STATEMENT
ON BEHALF OF
KCFG, CHANNEL 9, FLAGSTAFF, ARIZONA
RE PROPOSED CHANGE OF DTV ALLOTMENT
IN MM DOCKET NO. 87-268

**AUGUST 1997** 

COHEN, DIPPELL AND EVERIST, P.C.
CONSULTING ENGINEERS
RADIO AND TELEVISION
WASHINGTON, D.C.

City of Washington  District of Columbia	)	;	SS	
Warren M. Powis, being d	luly	sv	worn upon his oath, deposes and states that:	
He is a graduate electrical engineer of the University of Canterbury, New Zealand, a Registered Professional Engineer in the District of Columbia, the State of Virginia, the State of South Carolina, and Vice President of Cohen, Dippell and Everist, P.C., Consulting Engineers, Radio - Television, with offices at 1300 L Street, N.W., Suite 1100, Washington, D.C. 20005; previously employed for 15 years with the New Zealand Broadcasting Corporation; a member of the Institution of Professional Engineers New Zealand (IPENZ), the Association of Federal Communications Consulting Engineers (AFCCE), and the National Society of Professional Engineers (NSPE).				
That his qualifications are a matter of record in the Federal Communications Commission;				
That the attached engineering report was prepared by him or under his supervision and direction and,				
That the facts stated herein are true of his own knowledge, except such facts as are stated to be on information and belief, and as to such facts he believes them to be true.				
			Warren M. Powis District of Columbia	
			Professional Engineer Registration No. 8339	
Subscribed and sworn to before m	e thi	is	Motary Public	
			My Commission Expires: 2/28/98	

This engineering statement has been prepared on behalf of KM Communications, Inc., permittee of television broadcast station KCFG, Channel 9, Flagstaff, Arizona, in support of its request to change the digital television (DTV) allotment assigned to KCFG in the Sixth Report & Order in MM Docket No. 87-268, in the Matter of Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service. Specifically, KCFG requests a change in its DTV allotment from Channel 28 to Channel 32.

#### Proposed Change in DTV Allotment

The requested change in DTV allotment for KCFG from Channel 28 to Channel 32 will resolve any potential first-adjacent channel incompatibility problems anticipated between KCFG's DTV Channel 28 and KWBF's DTV Channel 27 since the two sites are located 31.3 km apart. While the first-adjacent channel spacings of Section 73.623(d) and (e) are met, KCFG is concerned about the results of tests conducted on a DTV transmitter in the Summer of 1996 which indicated an approximate 25 dB increase in first-adjacent channel interference from out-of-band DTV signals into NTSC signals. Therefore, KCFG believes that it is not unreasonable to assume a 25 dB worsening in the first-adjacent DTV to DTV ratios in the real-world situation.

The attached Table I is an allocation study depicting the distances from the proposed Channel 32 DTV operation of KCFG to other NTSC stations. Table II is an allocation study depicting distances from the FCC allotted Channel 28 DTV operation of KCFG to other NTSC stations. Table III lists the pertinent co-channel and

first-adjacent channel DTV allotments surrounding KCFG DTV options (Channels 32 and 27).

KCFG believes that Channel 32 will provide it with virtually full replication of its current Channel 9 service area. In addition, the potential first-adjacent DTV Channel 28/Channel 27 interference situation within Flagstaff will be resolved.

# TABLE I PROPOSED CHANNEL 32 DTV TO NTSC ALLOCATION STUDY AUGUST 1997

				Dis	Distance		
Chan	nel	Call	City/State	<u>Actual</u> km	<u>Required</u> km		
N	32	KCFG-DTV FI	agstaff, AZ				
N-15	17	None within	150 km		96.6		
N-14	18	None within	150 km		96.6		
N-8	24	None within	150 km		96.6		
N-7	25	None within	150 km		96.6		
N-4	28	None within	150 km		96.6		
N-3	29	None within	150 km		96.6		
N-2	30	None within	150 km		96.6		
N-1	31	None within	150 km		88.5		
N	32	None within	350 km		244.6		
N + 1	33	None within	150 km		88.5		
N + 2	34	None within	150 km		96.6		
N+3	35	None within	150 km		96.6		
N+4	36	None within	150 km		96.6		
N + 7	39	None within	150 km		96.6		
N+8	40	None within	150 km		96.6		

# TABLE II DTV TO NTSC FCC CHANNEL 28 ALLOCATION STUDY AUGUST 1997

			Distance		
<u>Chan</u>	<u>nel</u>	Call City/State	<u>Actual</u> km	Required km	
N	28	KCFG-DTV Flagstaff, AZ			
N-14	14	None within 150 km		96.6	
N-8	20	None within 150 km		96.6	
N-7	21	None within 150 km		96.6	
N-4	24	None within 150 km		96.6	
N-3	25	None within 150 km		96.6	
N-2	26	None within 150 km		96.6	
N-1	27	None within 150 km		88.5	
N	28	None within 350 km		244.6	
N + 1	29	None within 150 km		88.5	
N + 2	30	None within 150 km		96.6	
N+3	31	None within 150 km		96.6	
N+4	32	None within 150 km		96.6	
N + 7	35	None within 150 km		96.6	
N+8	36	None within 150 km		96.6	

# TABLE III DTV TO DTV ALLOCATION STUDIES AUGUST 1997

				Distance	
Chan	nel	Call	City/State	<u>Actual</u> km	<u>Required</u> km
N	32	KCFG-DTV	Flagstaff, AZ		
N-1	31	None wi	ithin 150 km		<32.2,>88.5
N	32	None wi	thin 280 km		223.7
N + 1	33	None wi	thin 150 km		<32.2,>88.5
				Dis	tance
Chan	nel	Call	City/State	<u>Actual</u> km	<u>Required</u> km
N	28	KCFG-DTV	Flagstaff, AZ		
N-1	27	KWBF-DTV	Flagstaff, AZ	31.3	<32.2,>88.5
N	28	None wi	thin 280 km		223.7
N+1	29	None wi	thin 150 km		<32.2,>88.5